

No.

7800083



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Quali-Sel, Inc.

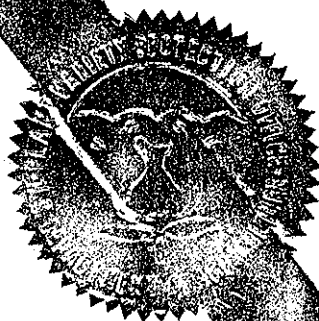
Whereas, THERE HAS BEEN PRESENTED TO THE
Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *seventeen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXHIBIT OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

LETTUCE

'Amaral 400'



In Testimony Whereof, I have hereunto set
my hand and caused the seal of the Plant
Variety Protection Office to be affixed
at the City of Washington
this 1st day of March in
the year of our Lord one thousand nine
hundred and seventy-nine

Attest:

Samuel L. Taylor
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Bob D. [Signature]
Secretary of Agriculture

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION

FORM APPROVED
OMB NO. 40-R3822

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

1a. TEMPORARY DESIGNATION OF VARIETY		1b. VARIETY NAME AMARAL 400		FOR OFFICIAL USE ONLY PV NUMBER 7800083	
2. KIND NAME LETTUCE		3. GENUS AND SPECIES NAME LACTUCA SATIVA L.		FILING DATE 6-6-78	TIME 2:30 P.M.
4. FAMILY NAME (BOTANICAL) COMPOSITAE		5. DATE OF DETERMINATION JUNE 1, 1977		FEE RECEIVED \$ 500.00 \$ 250.00	DATE 6-6-78 12-4-78
6. NAME OF APPLICANT(S) QUALI-SEL, INC.		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) 11 West Laurel Drive Suite 125 Salinas, California 93906		8. TELEPHONE AREA CODE AND NUMBER (408)443-1013	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) CORPORATION		10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION CALIFORNIA		11. DATE OF INCORPORATION March 1, 1972	
12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS: Quali-Sel, Inc. 11 W. Laurel Drive Suite 125 Salinas, California 93906					

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- ☒ 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
- ☒ 13B. Exhibit B, Novelty Statement.
- ☒ 13C. Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)
- ☒ 13D. Exhibit D, Additional Description of the Variety.

14a. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a). (If "Yes," answer 14B and 14C below.)		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
14b. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?	14c. IF "YES," TO 14B, HOW MANY GENERATIONS OF PRODUCTION BEYOND BREEDER SEED?		
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED		
15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO (If "Yes," give name of countries and dates.)			
15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO (If "Yes," give name of countries and dates.)			

16. DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER (THEIR) NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL? ☐ YES ☒ NO

17. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

May 26, 1978
(DATE)

(SIGNATURE OF APPLICANT)

1

(DATE)

(SIGNATURE OF APPLICANT)

INSTRUCTIONS

GENERAL: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$500 fee (\$250 filing fee and \$250 examination fee) to U.S. Dept. of Agriculture, Agricultural Marketing Service, Livestock, Poultry, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

- 5 Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.

- 13a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.

- 13b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.

- 13c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.

- 13d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as, plant habit, plant color, disease resistance, etc.

- 14a If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "NO," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)

- 15a See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.





QUALI-SEL, INC.

7800083

VARIETY: AMARAL 400

EXHIBIT A

Origin and Breeding History of the Variety

1. AMARAL 400 originated from a hand pollinated cross between Vanguard and Calmar. The cross was made by Quali-Sel Seeds personnel in 1970.
2. The F_1 seed was planted in 1971. The selection process began in 1972 and was based on color, heading ability and bolt tolerance. The process continued until uniformity was obtained.
3. Trial plantings were conducted throughout Arizona and California to assure uniformity and desired plant type.
4. AMARAL 400 is genetically uniform and free of distinct variations.



QUALI-SEL, INC.

7800083

VARIETY: AMARAL 400

EXHIBIT B

DATA INDICATIVE OF NOVELTY

AMARAL 400 most closely resembles the variety, Salinas. The distinguishing features of AMARAL 400 compared to Salinas are:

1. AMARAL 400 has greater bolt tolerance than Salinas. Salinas is not adapted to the southern sections of the Salinas Valley during the warm, summer months. AMARAL 400 is well adapted to this area.
2. The wrapper leaf texture and margins are more smooth than Salinas.
3. AMARAL 400 has greater heading characteristics than Salinas in the warm, summer months. Salinas tends to be more puffy, whereas AMARAL 400 makes a uniform, solid head.
4. The seed color of AMARAL 400 is white. AMARAL 400 is best adapted to the warm, growing areas of the Salinas Valley of California.



QUALI-SEL, INC. *Established to Fill a Need*

SALINAS, CALIFORNIA 93906 • 11 W. LAUREL DRIVE • SUITE 125 • TELEPHONE (408) 443-1013

August 31, 1978

EXHIBIT B ADDENDUM

7800083

Mr. H.H. Fisher, Examiner
Plant Variety Protection Office
United States Department of Agriculture
Livestock, Poultry, Grain and Seed Division
National Agricultural Library Building
Beltsville, Maryland 20705

Dear Mr. Fisher:

Enclosed are some additional measurements on Amaral 400 that you requested:

	<u>Frame Diam.</u>	<u>Core Diam.</u>	<u>Core Length</u>	<u>SS Length</u>
Amaral 400	54 cm	3.5 cm	4.4 cm	104 cm
Blanco	49 cm	3.3 cm	5.3 cm	116 cm

The color of Amaral 400 is a lighter green than Blanco. The frame diameter, core diameter and core length are based on a June 15 planting date in Salinas, California. The seed stock length is based on an April planting date in the San Joaquin Valley in California.

Please contact me if additional information is needed.

Sincerely,

QUALI-SEL, INC.

Kenneth L. Dubas
Research Director

KLD/bb

OBJECTIVE DESCRIPTION OF VARIETY
(LETTUCE)

INSTRUCTIONS: See reverse.

NAME OF APPLICANT(S)

Quali-Sel, Inc.

ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code)

11 W. Laurel Drive Suite 125
Salinas, California 93906

FOR OFFICIAL USE ONLY

PVPO NUMBER

297 - 1 -

7800083

VARIETY NAME OR TEMPORARY
DESIGNATION

AMARAL 400

Place the appropriate number that describes the varietal character of this variety in the boxes below.

1. PLANT TYPE:

10 = CUTTING (Leaf)

20 = STALK

50 = BUTTERHEAD

60 = LATIN

70 = OTHER (Specify) _____

30 = COS

31 = SELF-CLOSING
GROUP32 = LOOSE-CLOSING
GROUP

40 = CRISPHEAD

41 = IMPERIAL GROUP

42 = GREAT LAKES GROUP

43 = VANGUARD

44 = NEW YORK GROUP

2. SEED COLOR:

1 = WHITE 2 = BLACK 3 = YELLOW

3. ANTHOCYANIN:

1 = ABSENT 2 = PRESENT

4. LEAF CONTAINING ANTHOCYANIN:

1 = COVERED 2 = SPOTTED 3 = ALONG MARGIN 4 = ABSENT 5 = OTHER (Specify) _____

5. LEAF SURFACE TEXTURE:

1 = SMOOTH 2 = BLISTERED

6. LEAF SURFACE REFLECTANCE:

1 = DULL 2 = GLOSSY 3 = OTHER (Specify) _____

7. LEAF MARGIN:

1 = STRAIGHT 2 = WAVY
3 = CURLED1 = ENTIRE 2 = DENTATE 3 = INCISED
4 = DEEPLY INCISED 5 = OTHER (Specify) _____

8. LEAF SHAPE:

1 = ROUNDED 2 = POINTED

1 = BROADER THAN LONG 2 = LONGER THAN BROAD 3 = OTHER (Specify) _____

9. LEAF COLOR: (See reverse.)

1 = RED 2 = REDDISH-BROWN 3 = YELLOW 4 = YELLOWISH-GREEN 5 = GREYISH-GREEN
6 = BLUE-GREEN 7 = DARK-GREEN 8 = VERY DARK GREEN

10. HEADS:

1 = SPHERICAL 2 = FLATTENED 3 = ELONGATE
4 = POINTED 5 = NON-HEADING

11. PLANT SIZE: (See reverse.)

1 = SMALL 2 = MEDIUM 3 = LARGE

12. CULTURE:

1 = SUMMER CROP 2 = WINTER CROP 3 = NOT SPECIFIC 4 = UNDER GLASS 5 = OTHER (Specify) _____

13. SIZE OF 10-DAY OLD SEEDLING GROWN UNDER CONSTANT LIGHT (Growth Chamber) AT 25° C.: (Place a zero in first box (i.e.)) when size is 9 mm. or less.)

mm. LENGTH OF SEEDLING

mm. LENGTH OF COTYLEDON

mm. WIDTH OF COTYLEDON

14. DISEASE RESISTANCE TO: (Enter zeroes in box(es) where there is no special disease resistance.)

1 = TIPBURN

2 = MOSAIC

3 = DAMPING OFF

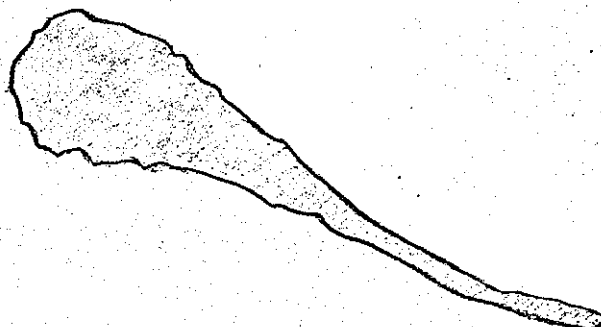
4 = DOWNY MILDEW

5 = SCLEROTINIA
ROT6 = BROWN
BLIGHT

7 = BIG VEIN

8 = OTHER (Specify) _____

15. OUTLINE THE FOURTH LEAF: (For standardization purposes, the fourth leaf should be taken from a 20-day old plant grown under constant light.)



FORM GR-471 (REVERSE)

16. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER		NAME OF VARIETY				
Leaf color		Salinas				
Leaf pigmentation		Salinas				
Leaf shape		Salinas				
Plant size		Salinas				
Head size		Salinas				
VARIETY	NO. OF DAYS TO HEAD MATURITY UNDER WINTER CROPPING	LOCATION	NO. OF DAYS TO HEAD MATURITY UNDER SUMMER CROPPING	LOCATION	NO. OF DAYS TO SEED STALK EMERGENCE UNDER SUMMER CROPPING	LOCATION
Submitted	Approx. 81	Yuma, AZ	Approx. 80	Salinas	Approx. 70	San Joaquin Valley, CA
Similar	Approx. 83	Yuma, AZ	Approx. 82	Salinas	Approx. 65	San Joaquin Valley, CA
Name of similar variety →	Empire		Salinas		Salinas	

INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for completing this form:

1. C. M. Rodenburg, 1960, Varieties of Lettuce, An International Monograph, Instituut Voor de Veredeling van Tuinbouwgewassen, Wageningen, Holland.
2. L. L. Morse, 1930, Field Notes on Lettuce, published by Ferry-Morse Seed Co.

LEAF COLOR: Nickerson's or any recognized color fan may be used to determine the leaf color of the described variety. The following lettuce varieties may be used as a guide to identify the eight colors listed on the form.

<u>Color</u>	<u>Variety</u>
Red	"Salad Trim"
Reddish-brown	"Ruby"
Yellow	"Salad Bowl"
Yellowish-green	"Oakleaf"
Greyish-green	"White Boston"
Bluish-green	"Bibb"
Dark-green	"Imperial" group
Very dark green	"Deer Tongue"

PLANT SIZE: The following varieties may be used as a guide to identify the plant type size:

TYPE	COMPARABLE VARIETIES		
	SMALL	MEDIUM	LARGE
Cutting (leaf)	Boston-Curled	Prize Head	Grand Rapids
Stalk (stem)	Celtuce	--	--
Cos	Express	Parris Island	Giant White
Crisphead	Mignonette	Hanson (Merit)	Climax
Butterhead	Tom Thumb	Big Boston	Mammoth Butter
Latin	Sucrino	Creole	Deer Tongue



QUALI-SEL, INC.

7800083

VARIETY: AMARAL 400

EXHIBIT D

BOTANICAL DESCRIPTION OF THE VARIETY

Annual: A crisphead variety with a medium sized frame. The wrapper leaves are lightly savoyed and the margins are very smooth. The wrapper leaves have a dull Vanguard shade of green.

The head is spherical. The core diameter is medium and the core length is very short. The butt shape tends to be rounded with a medium green color. The petioles are medium in width. The variety is best adapted to the warm summer months of the Salinas Valley.

The seed color is white.

EXHIBIT F

to
ASSET ACQUISITION AGREEMENT
by and between
QUALI-SEL, INC., a Delaware corporation,
and
KONINKLIJKE ZAAIZAADBEDIJVEN GEBROEDERS SLUIS, B.V.,
a corporation formed under the laws of The Netherlands

ASSIGNMENT OF PLANT VARIETY PROTECTION CERTIFICATES
AND PLANT VARIETY PROTECTION CERTIFICATE APPLICATIONS

WHEREAS, QUALI-SEL, INC., a Delaware corporation the mailing address for which is P.O.Box 4370, Salinas, California U.S.A., 93912-4370, is the owner of certain Plant Variety Protection Certificates issued either to QUALI-SEL, INC., or to BRUCE CHURCH, INC., a California corporation by the Plant Variety Protection Office or by the United States Department of Agriculture, all as listed below (referred to collectively as the "PVPs"); and

WHEREAS, KONINKLIJKE ZAAIZAADBEDIJVEN GEBROEDERS SLUIS, B.V., a corporation formed under the laws of The Netherlands, the mailing address for which is Post Box 22, 1600 AA Enkuisen, The Netherlands, is desirous of acquiring the PVP's and the certificates and application thereof;

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, QUALI-SEL, INC. and BRUCE CHURCH, INC. hereby assigns to KONINKLIJKE ZAAIZAADBEDIJVEN GEBROEDERS SLUIS, B.V. all right, title and interest in and to the PVPs.

The Plant Variety Protection Office is requested to record the assignment of the PVPs (and acknowledge transfer of the ownership of the application, referred to above) in accordance with Section 101 of the Plant Variety Protection Act (7 U.S.C. 2531).

PVP Certificate Number	Date of Issuance	Owner	Name of Variety	PVP Issued To
7600003	Sept. 7, 1976	Quali-Sel, Inc.	Domingos 43	Quali-Sel, Inc.
7500041	Oct. 17, 1975	Quali-Sel, Inc.	Excell	Quali-Sel, Inc.
7800083	Mar. 1, 1979	Quali-Sel, Inc.	Amaral 400	Quali-Sel, Inc.

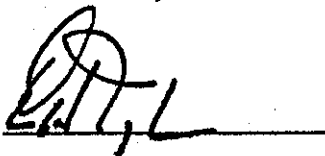
PVP Application Number	Date of Filing	Owner	Name of Variety	Applicant
8800022	Nov. 27, 1987	Quali-Sel, Inc.	Lajolla	Bruce Church, Inc.

This assignment is executed this 7th day of March, 1988, at Salinas, California.

Bruce Church, Inc.

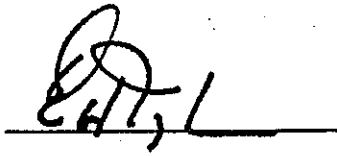
Quali-Sel, Inc.

By



Its President

By



Its Vice President

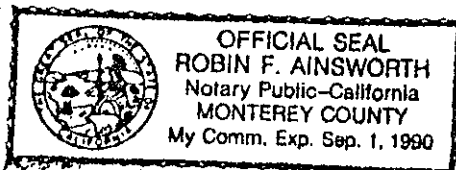
Acknowledgement for Corporation

State of California)

) SS

County of Monterey)

On this 7th day of March, in the year 1988, before me Edward H. Taylor, personally known to me to be the person who executed the within instrument as president of Bruce Church, Inc. and vice president of Quali-Sel, Inc. and acknowledged to me that the corporation executed it.



Notary Public